

Continuing the Talk about American Education: A Memo to My Friend

by Eunjoo Jung

It was nice to meet with you the other day at the gathering and discuss the general issues of the American education system. In this note, let me continue to address ideas on American schooling compared with that of Japan, which I have broken down into three categories. First, I will briefly examine cultural differences between Japan and America as a lens through which to look at these two countries. Second, I am going to compare Japanese and American schooling in terms of the four suggestions you proposed to me last time. Finally, among various options we can consider, I will share a classroom model from a large-scale project and two simple yet effective ideas that all offer promise for American students' academic, social, and ethical growth.

I would like to inject a note of caution here. As in every country across the world, Japanese educators are working hard to improve their education system through a series of reforms. Although we see exemplary academic achievement in Japan and other Asian countries, including Korea, Singapore, China, and Hong Kong, dissatisfied educators in those countries still see weaknesses in their own educational systems (Bjork and Tsuneyoshi 2005). One example is that, in Japan, there are lively debates about "reduced-intensity reform" (Bjork and Tsuneyoshi 2005; Nishimura, Tose, and Okabe 1999) as the Japanese work to remediate their educational problems. Therefore, please keep in mind that I am using the case of Japan as a starting point to put American education in a global context for our continued discussion, not because I regard Japan's system as perfect or without weaknesses.

Different Culture

With those points in mind, I would like to review some cultural differences between Japan and America, which will affect whether or not Americans can directly apply useful practices and principles from Japan. First, as Santrock (2001) pointed out, Asian cultures place a high value on

collectivism. In Japan, collectivism is known to be the “live spirit of every organization and everyday life” (Cherlin 1996, p. 500). In a collectivistic culture, people tend to think of their communities and their collective interests first before their individual interests, placing a priority on the goals and welfare of their groups (Cherlin 1996).

In contrast, Western countries, including America, typically value individualism (Cherlin 1996). Thus, in America, “individualism and self-interest typically play out in the academy as any other organizations” (Cherlin 1996, p. 503). This cultural difference is one reason “strategies that are effective in Japan might not work, or might not be regarded as appropriate in the United States” (Lewis 1995, p. 189).

A meta-analysis of 170 research studies by Oyserman, Coon, and Kimmelmeyer (2002) revealed that the dimensions of individualism and collectivism reliably predict people’s views, behaviors, and personalities. Other researchers (Sue and Sue 1999; Williams 2003) provided empirical evidence of such differences among countries and individuals from different backgrounds, although Williams pointed out that the finding needs to be approached with caution.

We need to acknowledge the fact that not all differences, such as those between Japanese schools and American schools, can be explained by differences in collectivistic and individualistic cultures. However, we can at least recognize the difficulties we face as a country and a society in adopting other countries’ values, ideas, cultures, or instructional methods for our education system.



Not-So-Good News and Good News

I will address your four suggestions regarding American schooling. When we met the other day, you suggested that to improve our students' academic achievement, we need more testing; increased administrative oversight of teachers; a return to basics; and stronger discipline.

Before we review those ideas, however, let me first mention some data from the significant "Trends in International Mathematics and Science Study" (TIMSS). TIMSS collected mathematics and science achievement data in the fourth and eighth grades across more than four dozen countries around the world. So far, TIMSS has been administered four times (1995, 1999, 2003, and 2007); the fourth-round data will be released soon.

In the 1995 TIMSS study, eighth-grade American students received an average mathematics score of 500; students from Singapore, an average of 643; and those from Japan, an average of 605 (Office of Educational Research and Improvement [OERI 1996]). The results of the 1995 study revealed that there were "only seven nations out of forty-two which scored lower than the United States" (Stigler and Hiebert 1999, p. 6). Thus, American students, a decade ago, achieved far below the midpoints among forty-two participating nations (Geist 2000). The seven nations that performed worse than the United States were Lithuania, Cyprus, Portugal, Iran, Kuwait, Colombia, and South Africa (Stigler and Hiebert 1999).

However, here is the good news: the results of the 2003 TIMSS study make clear that the mathematics and science achievement of American students has systematically improved. The leaders in the 2003 TIMSS study in mathematics included Singapore with 605, followed by Korea, 589; Hong Kong, 586; China, 585; and Japan, 570. American eighth-graders received an average score of 504 in mathematics. The average score of American students was still relatively lower than those of the top-performing countries, yet U.S. students improved their ranking from thirty-fourth of forty-two countries in 1995 to eighteenth of fifty countries in 2003 (Mullis et al. 2004). Of course, numerous details need to be explained regarding the interpretation of the test results, but they are beyond the focus of our discussion here.

Then what does this information tell us? Perceptions can differ, but to me, the U.S. performance was a great improvement from the past. Still, Americans have seventeen countries far ahead of them; the gap in the scores is, in fact, quite profound. Are you satisfied with such performance? I am not. I am dissatisfied, not because American students still rank so low, but because we may not be providing the most relevant educational experiences possible to our students. Let us look at those four ideas—more testing, administrative oversight, returning to basics, and more discipline—that you brought up and use the Japanese educational system as an example.

Some Ideas to (Re)consider

More Testing?

Although more testing should have different meanings for each person, in general, Japanese students do not necessarily do well in mathematics just because they are tested more than American students. Rather, one of the reasons could be that Japanese teachers typically teach challenging mathematics topics in a more-focused way (Stiegler and Hiebert 1999). Often, Japanese teachers try to help students understand mathematical concepts before they learn the steps for solving problems. Following national objectives that emphasize the social, ethical, and intellectual development of the whole person, Japanese teachers commonly explore ways to teach for understanding rather than drill students for test performance (Lewis 1995; Sato 2004).

Japanese schools do not divide students according to ability or achievement; all students in a given grade level study the same material, and they are viewed and challenged as individuals who can solve, think, and persist as they help each other in the problem-solving process (D'Ailly 1992; Stiegler and Hiebert 1999). Therefore, in Japan, even wrong answers become useful springboards for class discussion and reflection, whereas in America, wrong answers are infrequently regarded as anything more than merely wrong.

In America, testing has always been big business, and it is becoming even bigger, in part since the adoption of the “no child left behind” goal. Accordingly, teachers tend to teach to the standardized tests, providing correct answers through drills and worksheets. As evidenced in videotaped classroom scenes, American teachers often provide those answers before students have enough time and opportunities to solve and think by themselves (House 2002; OERI 1996). More testing will not necessarily lead to academic improvement if other aspects of the teaching and learning process, students’ potential for problem solving, and their participation are not considered in addition.

More Administrative Oversight over Teachers?

Another suggestion you posed was increased administrative oversight of teachers. You might believe that more such supervision would help teachers improve their quality and eventually student achievement. As aforementioned, teachers in Japan are quite autonomous in their decisions and practices under the umbrella of the national curriculum (D'Ailly 1992; Sato 2004). Teachers enjoy relatively high prestige and compensation (Lewis 1995). In addition, teachers “have more influence on school policy and more help from their fellow teachers than do American teachers” (Lewis 1995, p. 199). Moreover, Japanese families tend to place great importance on education and respect for teachers (Sato 2004). Class sessions

and classrooms are off-limits to others because teachers' autonomy and authority are highly valued. Overall, Japanese educators do not believe that heavy administrative control makes a better teacher.

In contrast, American teachers frequently feel "they are not regarded as professionals, they have poor compensation, endless paperwork with incentives and accountability systems that make learning as factory production, and school redesign effort which usually exclude the teachers' voice" (Lewis 1995, p. 199). If American teachers feel that way, more administrative control over teachers is unlikely to create and develop better teachers and teaching conditions.

Returning to Basics?

You also suggested returning to basics, which I interpret as developing more academically rigorous drills and practices. Despite many rigorous academic programs (Sato 2004), Japanese classrooms stress not only intellectual development but also "friendliness, helpfulness, persistence, and responsibility" (Lewis 1995, p. 61) as well as effort. Many Asian countries, including Japan, encourage students to give their best effort, but they tend not to focus on students' innate abilities.

However, Americans in general tend to compliment children by saying "She is so talented" or "He is so gifted." In contrast, "She works so hard" or "He is so studious" is often not considered complimentary. Such a remark sometimes "puts down" the importance of effort and even implies "She has to work that hard because she is not talented" or "He has to be studious because he is not that intelligent."

The Japanese education system values educating the whole person—one who can study, think, and put forth extra effort to achieve even though he or she may not be that gifted or talented, and one who can live harmoniously with others. That is, the Japanese try to teach more than the basics—tests, academic disciplines, drills, and skills—and to educate a whole person who can put forth the effort to do well and succeed.

More Discipline for the Students?

Your final suggestion was that more discipline might improve achievement. Japanese students are quite disciplined from a Western viewpoint, but not because schools discipline their students the way Western teachers usually do. Japanese teachers do not have to quiet their classes and seldom send students to the counselor's or principal's office unless there is a major problem. Instead, Japanese schools and teachers provide for young children's autonomy in many ways. They believe in students' potential and their willingness to achieve and control themselves.

In most Japanese schools, children rotate in a leadership role called *toban*, or classroom monitor (Lewis 1995, p. 105), which can be regarded

as the “captain’s role”; thus, “discipline emphasizes self-evaluation rather than evaluation by the teacher, and self-management rather than adult control” (Lewis 1995, p. 85). Discipline is not enforced from the outside. Everybody in the community of learners shares the responsibility for collaborating and cooperating with peers (Lewis 1995; Sato 2004). The Japanese discipline system could be called “bottom-up,” and the American, “top-down.”

Some Approaches to Consider

What might be some ideas we can actually try or at least suggest to the public regarding improvement in American schools? Let me suggest three possible small changes to try in the American school system.

Considering an Effective Classroom Model

The Child Development Project, led by Comer (1988), a “school change effort” (Lewis 1995, p. 192) developed by American researchers and educators in the Comer School Development Program (Comer 1988, 2001, 2007), suggests how an effective classroom model could actualize the ideas discussed above. The goals of the schools in the study and the project involved creating “caring, supportive relationships, intrinsic motivation, and attention to ethical and social dimensions of learning” (Lewis 1995, p. 192), which are similar to the goals of the Japanese education system. Comer’s longitudinal study using the model found positive effects on American students’ academic, social, and ethical development (Comer 1988; Lewis 1995).

Because the Comer model closely resembled the Japanese notion of educating the whole person, its success despite different cultural backgrounds and approaches has great implications for U.S. educators. If it is too difficult for us to apply the model to the classrooms as a system, perhaps we can apply individual concepts to our daily classroom instructional practices and interactions with students.

Reducing Teaching Loads

Many areas are easier to discuss in theory than to adopt because of various societal, instrumental, or financial barriers. In that sense, research showing that U.S. eighth-grade teachers conduct more classes per week than their Japanese counterparts is significant. On questionnaires regarding teaching loads, American teachers reported an average of twenty-six periods of teaching per week and Japanese teachers, sixteen periods of teaching per week (OERI 1996). Compared to the American average of twenty-four to twenty-five students per class, Japanese classes average thirty-seven students, in part to lessen teaching loads. Although you might not agree with this policy, we should consider it more seriously and share

our conclusions openly with administrators. Perhaps more research is needed in this area too. By lessening teaching loads, larger class sizes allow teachers time to consult with colleagues, provide opportunities for professional development, and allow more money for salaries. The policy could also solve teacher shortages. Research regarding class size also shows that student achievement and instructional methods do not greatly differ according to class sizes (Stasz and Stecher 2000).

The class-size issue has been analyzed in many ways. Research indicates that reducing class size permits more individualized attention to students, thus improving student achievement and teacher performance (Folger et al. 1989; Robinson and Wittebools 1986). In a meta-analysis, Glass et al. (1982) found that reducing class size from thirty-five to twenty in early grades (K-3), especially in mathematics, increased student achievement. However, reducing class size considerably is costly (Folger et al. 1989; Mitchell, Carson, and Badarak 1989) and did not positively affect students in higher grade levels (Robinson and Wittebools 1986).

If reducing class size does not profoundly improve achievement, especially above fourth grade, and if teachers do not alter instructional methods significantly (Stasz and Stecher 2000), costs and other issues might dictate that American schools reconsider larger class sizes, a change that could eventually benefit both teachers and students.

Providing Teachers' Space

Another possibility for improving education in America is to provide a large teachers' room in each school, as Japanese schools do. A common space where teachers can interact and learn from one another would positively affect both teachers and students, even if not every teacher participated at first. American teachers seldom have informal opportunities to share questions about teaching-related issues that Japanese teachers do (Yoshida and Fernandez 2004). Japanese schools are designed with one large teachers' room. Each teacher has a desk, and the seating is arranged so that all teachers from a particular grade or subject sit near one another. When not actually instructing classes, Japanese teachers spend most of their time in the room with their colleagues. They share advice, ideas, and teaching materials (Gump 2002).

In America, although the system has changed considerably with the introduction of interdisciplinary teams and cooperative projects, teaching is usually individual work with little sharing among teachers. Establishing an open space for teachers where teachers from all disciplines can share expertise would be relatively easy and productive. However, it is important that the nature of the space should differ from that of a teachers' lounge, which often is not conducive to constructive, education-related conversations and ideas. The teachers' room should be open to students

to promote interaction between teachers and students (Gump 2002; Yoshida and Fernandez 2004). With a constructive atmosphere in which teacher interactions are well-promoted and established, we might expect to see various collaborative teams, lesson-study groups, working senior mentor-teacher programs, and teacher-as-researcher groups.

Conclusion

I considered several topics such as the cultural differences of Japan and America, the pros and cons of your four suggestions, and three small and big approaches for us to consider in American schools regarding improvement of American students' academic achievement.

In an age when much reform and change are in progress, and when so many lament the failure of the educational system in America, why not start small, and from where we are? The reforms we have considered need not begin right away. In any case, any changes should be reviewed with one major lesson in mind, which we have learned from Japanese schools: put the person first, not the system.

References

- Bjork, C., and R. Tsuneyoshi. 2005. "Education in Japan: Competing Visions for the Future." Special section on international education. *Pbi Delta Kappan* 86 (8): 619-623.
- Cherlin, A. D. 1996. *Public and Private Families*. New York: McGraw Hill.
- Comer, J. 1988. "Educating Poor Minority Children." *Scientific American* 259 (5): 42-48.
- . 2001. "Schools That Develop Children." *The American Prospect* 12 (7): 30-35.
- . 2007. "Comer School Development Program." Retrieved September 3, 2007, from <<http://info.med.yale.edu/comer/>>.
- D'Ailly, H. H. 1992. "Asian Mathematics Superiority: A Search for Explanations." *Educational Psychologist* 27 (2): 243-247.
- Folger J., C. Breda, S. A. Beach, and G. Badarak. 1989. "Evidence from Project Star about Class Size and Student Achievement." *Peabody Journal of Education* 67: 1-58.
- Geist, E. A. 2000. "Lessons from the TIMSS Study." *Teaching Children Mathematics* 7 (3): 112-120.
- Glass, G. V., L. S. Cahen, M. L. Smith, and N. N. Filby. 1982. *School Class Size: Research and Policy*. Beverly Hills, Calif.: Sage.
- Gump, S. 2002. "World View: Getting to the Heart of Public Junior High Schools in Japan." *Pbi Delta Kappan* 83 (10): 788-295. For the Japanese schools and teachers Mr. Gump knows, switching to the "American Way" would break down the social and psychological network that holds Japanese public schools together. For them, a school without a teachers' room would be a school without a heart.
- House, J. D. 2002. "The Use of Computers in a Mathematics Lesson in Japan: A Case Analysis from the TIMSS Videotape Classroom Study." *International Journal of*

- Instructional Media* 29 (1): 113-120.
- Lewis, C. C. 1995. *Educating Hearts and Minds*. Cambridge, U.K.: Cambridge University Press.
- Mitchell, D. E., C. Carson, and G. Badarak. 1989. *How Changing Class Size Affects Classrooms and Students*. Riverside, Calif.: University of California, Riverside, California Educational Research Cooperative.
- Mullis, I. V. S., M. O. Martin, E. J. Gonzalez, and S. J. Chrostowski. 2004. *TIMSS 2003 Technical Report*. Chestnut Hill, Mass.: TIMSS and PIRLS International Study Center, Boston College. Retrieved September 18, 2007, from <<http://isc.bc.edu/timss2003i/released.html>>.
- Nishimura, K., N. Tose, and T. Okabe. 1999. *Bunsu ga dekinai daigakusei (College students who cannot solve problems with fractions)*. Tokyo: Keizai Shinposha.
- Office of Educational Research and Improvement (OERI). 1996. *Pursuing Excellence: A Study of U.S. Fourth-Grade and Eighth-Grade Mathematics and Science Achievement in the International Contest: Initial Findings from the Third International Mathematics and Science Study*. Washington, D.C.: U.S. Government Printing Office, 1-80.
- Oyserman, D., H. M. Coon, and M. Kimmelmeier. 2002. "Rethinking Individualism and Collectivism: Evaluation of Theoretical Assumptions and Meta-analyses." *Psychological Bulletin* 128: 3-72.
- Robinson, G. E., and J. H. Wittebools. 1986. *Class Size Research: A Related Cluster Analysis for Decision Making*. Arlington, Va.: Educational Research Service.
- Santrock, J. W. 2001. *Child Development*, 9th ed. New York: McGraw-Hill.
- Sato, N. E. 2004. *Inside Japanese Classrooms: The Heart of Education*. New York: RoutledgeFalmer.
- Stasz, C., and B. Stecher. 2000. "Teaching Mathematics and Language Arts in Reduced Size and Non-reduced Size Classrooms." *Educational Evaluation and Policy Analysis* 22 (4): 313-329.
- Stigler, J. W., and J. Hiebert. 1999. *The Teaching Gap*. New York: The Free Press.
- Sue, D. W., and D. Sue. 1999. *Counseling the Culturally Different: Theory and Practice*. New York: Wiley.
- Williams, B. 2003. "The Worldview Dimensions of Individualism and Collectivism: Implications for Counseling." *Journal of Counseling and Development* 81 (3): 370-375.
- Yoshida, M., and C. Fernandez. 2004. *Lesson Study: A Japanese Approach to Improving Mathematics Teaching and Learning*. Mahwah, N.J.: Erlbaum.

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